

DOCUMENT RESUME

ED 338 254

IR 053 784

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TITLE Information Transfer as Development Assistance.
Occasional Paper Series. Paper Number 8.
INSTITUTION Syracuse Univ., NY. Center for the Study of
Citizenship.; Syracuse Univ., NY. Kellogg Project.
PUB DATE May 88
NOTE 62p.
PUB TYPE Viewpoints (Opinion/Position Papers, Essays, etc.)
(120) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Access to Information; *Adult Education; Computer
Networks; *Developing Nations; Foreign Countries;
Higher Education; *Information Dissemination;
Information Networks; Information Retrieval;
Information Services; *Information Technology;
*Information Transfer
IDENTIFIERS *Information Counseling; *Kellogg Project NY;
Transborder Information Flow

ABSTRACT

This paper was jointly sponsored by the Center for the Study of Citizenship of the Maxwell School of Public Affairs and Citizenship and the Kellogg Project, a 5-year research project in Syracuse University's School of Education which is intended to provide not only physical access to information resources for adult educators through optical disk and computing technologies, but assistance with the information seeking process. The paper begins by discussing the conceptual framework of information as a form of development assistance; the problems encountered in information delivery to adult educators in developing countries; and lessons that may be learned from the information dissemination program. Two major paradigms of the Kellogg Project's assistance to adult educators in developing countries are then described: the International Information Sharing Network (IISN) and interactive long-distance Information Counseling (IC), which is designed to provide in-depth and personalized assistance in the acquisition, use, and application of information and data. Reflections on the role of adult education in Third World societies and on the nature of international information flows are interwoven throughout the paper. The paper argues that information is not a neutral agent, but one that reflects the values and expectations of those who produce, select, manage, transmit, and use it. It warns that the best intentions to remain apolitical in the design and implementation of information services cannot justify an abdication of responsibility for examining potential problems in the areas of equity of access, the technology gap, information overload versus deprivation, or the possibility of cultural domination by the dissemination of knowledge. Arguing that information transfer can be a form of development assistance, the paper concludes by identifying some policy issues and reviewing their implications for academic discourse and future research. (80 references) (MAB)

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Syracuse University
Center for the Study of Citizenship
and
Kellogg Project

OCCASIONAL PAPER SERIES

INFORMATION TRANSFER
AS DEVELOPMENT ASSISTANCE

by
Marta Dosa

Center Paper Number 8

May 1988

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General Statement

This paper is produced by the Center for the Study of Citizenship of the Maxwell School of Public Affairs and Citizenship, plus the Kellogg Project, both of Syracuse University. The Center was created to focus interdisciplinary scholarship and education upon five broadly related questions. For this joint Paper, the questions are presented in expanded form to apply to issues of Adult Education.

1. Do classical civic concepts such as public policy, office, civic virtue, and citizenship have any relevance in a modern political culture based upon ideas of interest group, pluralism, cost-benefit, economic development and public policy? For adult educators, this raises the question, for example, of whether a coherent concept of civic literacy is possible.

2. Can expert authority be reconciled with popular sovereignty? For the field of adult education, this raises questions about licensing, certification and professionalization similar to other fields of practice.

3. How do methodological controversies in social science and philosophy relate to civic issues? Adult educators may want to ask, as one example of such debates, what the civic consequences are of quantifying educational objectives and outcomes for adults. (For a Center study bearing on the civic implications of quantification, see Occasional Paper Number 2 by Bogdan and Ksander, "Policy Data as a Social Process," January 1985.)

4. What is a non-technocratic civic concept of public policy? Here one may ask, how can adult educators in the enterprise known as Continuing Professional Education define competence for the various professions beyond discrete technical skills alone?

5. Beyond descriptive civics (e.g. how the government works), is a coherent and universal standard for civic education possible in a socially segmented, culturally pluralistic society? Adult educators are uniquely well qualified to transcend boundaries of different social worlds. How can they use this opportunity to facilitate understanding of the civic themes implicit in the American national experience, such as those embodied in the movement?

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Original Announcement of the International Information-Sharing Network

The Kellogg Project, a five-year research project in Syracuse University's School of Education, represents a trend toward making the world's expanding store of information more accessible through advanced technology. But providing the physical means of access does not in itself ensure that people will locate the information they need. To help adult educators from other countries find needles in a haystack of data, Marta Dosa and Robert Oddy, professors in the School of Information Studies, are working with Kellogg Project staff to develop an information-sharing network that will begin operations in the summer of 1987. This network, linking practitioners, researchers, and policymakers, will center on an information counselor, Beth Oddy, assisted by an adaptive computerized workstation.

As information sources proliferate and retrieval systems become more complex, information seeking becomes increasingly confusing. Problems include formulating questions, locating and recognizing appropriate information sources, and choosing the most effective vocabulary to use with information sources, and choosing the most effective vocabulary to use with information retrieval systems. The concept of information counseling developed in response to such problems. Information counselors bridge the communication gap between people and systems. As information counselor for the Kellogg Project, Beth Oddy will bring human understanding to her work with adult educators, and professional expertise to her interaction with information systems.

For adult educators in developing countries, the lack of ready access to information resources compounds the problems of knowledge seeking. At the same time, rapid industrial and technological growth in these countries creates an urgent need for adult education. To adapt to changing conditions, adults must learn new

skills, assisted by programs that both emphasize the best use of available technologies, and incorporate indigenous knowledge and cultural values.

As an information counselor, Beth Oddy will attempt to meet the needs of international adult educators by responding to queries, offering guidance in using information to solve specific problems, and making current information available. Network participants might need information to develop innovative courses, administer programs, create teaching packages, introduce microcomputers, locate funding sources, or make contacts with colleagues in other parts of the world. Beth Oddy will assess clients' needs, choose optimal ways to fill them, help people use the new information, and assure systematic follow-up and feedback in order to evaluate the effectiveness of the counseling. She also will distribute current information updates to the network.

Through the information counselor's workstation, the Kellogg Project will gradually build its own database of stated information needs, responses to specific queries, organizational contacts, and background information that will help the counselor provide appropriate responses to international clients, and descriptions of counseling activities. At the core of the workstation's search system will be a relevance feedback device, which will allow the system to refine the counselor's queries based on her reactions to what is retrieved. Through its incremental knowledge-building process, the system will link the questions asked by adult educators with descriptions of the counseling process itself. Thus the system will continually "learn" from its own accumulating store of information.

The Kellogg Project is expected to make Syracuse University's extensive collection of adult education resources easily available to users. As these resources become accessible through the optical disk and computing technologies currently under development, international users too, will gain electronic access to the materials. The information-sharing network will be connected to this electronic system.

Acknowledgments

I am grateful to Roger Hiemstra, Director of the Kellogg Project, for creating the opportunity to put some of the ideas described in this paper into reality. Special thanks go to Manfred Stanley, Director of the Center for the Study of Citizenship, for initiating this paper, based on a project report, and for generously sharing with me his insights, comments and suggestions during the writing.

Beth Oddy, Information Transfer Specialist of the Kellogg Project, helped considerably by contributing her experience in information counseling. Maureen Goodman, Mary Beth Hinton, Terry Keenan, and Dan Vertrees, all from the Kellogg Project, provided inspiration and help in many ways. My colleague in the School of Information Studies, Robert N. Oddy, made the interdisciplinary effort underlying this paper an intellectually valuable experience. Ollie Owen, from the Kellogg Project came to our rescue by arranging for the production of the paper. The skilled and dedicated assistance of Joan M. Watkins, School of Information Studies, was indispensable in the paper's preparation. Graduate students Abdul Rahman Al-Seri and Lanna Taweaset make excellent contributions to the references. I am sincerely thankful to them all.

Preface

Most people probably consider the concept of "information" to be about as morally neutral as a concept can be; mere "facts" or "data" to be treated as tools for some mental or physical project. Yet, even a cursory glance at the Oxford English Dictionary suggests the complex metaphysical, moral and social histories of the concept. Professor Dosa is well aware of this, having experienced these complications in her own rich career. This paper is a reflection of these experiences, focused in particular upon her role in the development of the Kellogg Project's International Information Sharing Network.

This paper is an invitation to adult educators, and citizens generally, to recover the subtleties associated with the idea of being "informed." Without such awareness, the notion of information is a technocratic tool in the service of those with the power to manipulate people's naive sense of "official fact." These reflections are in the rich tradition of adult education as political education.

Weaving through this paper is a sense of the challenge of technology; the constancy of its pressure upon our democratic political culture. Professor Dosa leads us across a terrain of themes. These include: the general non-neutrality of information; the relationships between information policy and "development" concepts (e.g. her discussion of "coping information" as a basic human need and her distinction between information requirements and information needs: her exploration of the role of indigenous cultural communication; the overriding significance of cultural context for the comprehension of information needs; the urgency for research into the unknown effects of new information technologies; the broad spectrum of relationships emerging between issues of information policy and the field of adult education (her discussion of the new guidance principle she calls "information counseling"); and finally, her discussion of the "awakening from innocence" that she expects all politically and culturally sensitive information specialists to undergo as they discover within

themselves disturbing doubts about "information" itself, its validity, credibility, appropriateness and relevance to the users.

Information policy, Professor Dosa is telling us, is political cultural policy. Information as development assistance is neither only technical nor merely a neutral helping hand; it is a catalyst for social change and a handmaid of social control. To respond to her invitation to think about these things highlights adult education appropriately in its dual relation to the liberal arts disciplines of the traditional academy and the frontiers people who must cope with history at the edge of time.

Manfred Stanley

Dr. Marta Dosa is Professor in the School of Information Studies at Syracuse University. Her teaching and research span four areas: information policies; technology transfer to developing countries; environmental information and gerontology/health care information. The common element in these fields is the interdisciplinary approach. She is an Adjunct Professor in the SUNY College of Environmental Science and Forestry, a consultant to the Kellogg Project and a member of the Center for the Study of Citizenship.

INTRODUCTION

This paper is about a project that supports the work of adult educators in developing countries by a new mode of information dissemination and exchange.* The assumption is that information transferred to and from developing countries by technological means most appropriate to the participants not only expands their connectedness with adult educators elsewhere and facilitates problem solving in the course of their practice or research, but represents an asset also to American scholars with a global perspective.

Originally this paper was written as a project report, and it still retains the spirit of directness and the narrative style of some reports. But I wanted to share my reflections on the expectations and experiences of more than a year's work with a larger community of people who have crossdisciplinary interests and who would interpret the implications of international information transfer in the context of their own work and conceptual associations.

* The term "developing country" will be used in the paper with the understanding that a wide range of economic, social and cultural differences exist among these countries as well as within each country.

For the three researchers involved in this activity - Beth Oddy, Robert N. Oddy and myself - adult education was a new field of study we needed to explore and better understand. Interdisciplinary inquiry always brings about a certain wonderment in the face of so many diverse and complex areas of research and professional experience. One is reminded that creativity has been defined as the "recognition of an underlying relationship between apparently diverse phenomena" (Gordon, 1979, p. 18). Often it is the heterogeneity of our approaches and conflicting interpretations of concepts that helps us to see problems in new ways.

Once a problem appears to us from a different angle or with a heightened intensity, it might give rise to the excitement of possibilities. This can happen either when we think about the problem or when nothing is further from us than thinking about it. This is the unfolding phase of a project, the easiest, happiest, and shortest phase. Soon new uncertainties and questions set in, but by this time the shared vision of possibilities and a better understanding of individual reactions usually enables team members to enter a prolonged phase of realistic discussions. We struggled to recognize the limitations of our project, to identify what we mean by "adult educators in developing countries," and to explore how information support may be offered to Third World colleagues without sounding presumptuous.

The quandary raised by the powerful impact of computer and telecommunication technologies on communication is this: on the one hand, probably no practitioner, scientist or consumer, living completely isolated from information flows anywhere in the world, can use his or her human potentials to the fullest; on the other hand, information in any form is not neutral but implicitly or explicitly value-loaded, and on occasion can be more disruptive than useful. The very ease of communication and information diffusion has created a totally new set of relationships, problems and responsibilities. These realities confront all projects, even those created and managed with the most serious determination to remain nonpolitical.

The conceptual framework of this paper can be expressed by three questions:

- o Can the transfer of timely and relevant information to practitioners, researchers and policymakers serve as a form of development assistance?
- o What problems are encountered by an information service that navigates between the hazard of supplying irrelevant and useless information and the hazard of cultural imperialism by information dissemination?
- o Will the combination of a computer-assisted service and research project help us to learn enough about the nature of international information transfer to identify the need for policy orientation and for further research?

Some answers to these concerns might be embedded in the response (if we are fortunate to find it) to an immediate question: What do we expect from the project in terms of research diffusion and experience exchange among adult educators in different countries and in terms of support to their work in environments of technology scarcity?

This paper will unfold along the following themes:

1. The conceptual framework has been formulated by three questions concerning information as a form of development assistance; the problems encountered by information delivery to adult educators in developing countries; and the lessons we may learn from the information dissemination program.
2. Two major paradigms of the Kellogg Project's assistance to adult educators in developing countries are described: The International Information Sharing Network (IISN) and personalized long-distance Information Counseling (IC); main features include information service, probing into the elusive nature of information, continual evaluation and learning, and the identification of problems for future research.

3. Reflections on the role of adult education in Third World societies and on the nature of international information flows are interwoven throughout the paper in order to detect the individual and societal issues that arise at the interface of these two concerns.
4. Why, one might ask, should we be concerned with these issues? The paper argues that information, be it in the form of data, narrative or image, is not a neutral agent but reflects the values and expectations of those who produce, select, manage, transmit and use it. In recent years not only personal interpretations of information, but also the international exchange of scientific, technological and socioeconomic data has been politicized. We must ask if education, research and civic activity are ready to deal with these issues.
5. A section on "Awakening from Innocence" refers to the realization, experienced by many development and information practitioners, that the best intentions to remain apolitical in the design and implementation of information services cannot justify an abdication of responsibility for examining potential problems of the equity of access, the technology gap, information overload vs. deprivation or the possibility of cultural domination by the dissemination of knowledge.
6. In regard to questions posed at the outset, information transfer is recognized as development assistance under certain circumstances, some policy issues are identified, and implications for academic discourse and future research are reviewed.

PROJECT SITE AND BEGINNINGS

An interdisciplinary effort at Syracuse University, the Kellogg Project began in September 1986 in the School of Education, supported by the W. K. Kellogg Foundation. Major goals serve the strengthening of practice as well as research in adult education:

1. Development of a text and image handling information system for an archive consisting of records of professional organizations and of major figures in North American adult education, using recent advances in optical disk and laser technology.
2. Promotion of information exchange among adult educators in a variety of ways.
3. Cooperation with other academic units, especially with the Center for the Study of Citizenship of the Maxwell School of Public Affairs and Citizenship to address critical issues in the relationship of adult learning and civic literacy.

In order to implement these goals, the Kellogg Project (a) brings together adult educators, historians, archivists, and social, computer and information scientists for research and project implementation; (b) coordinates a visiting scholar program; (c) provides an international electronic network, AEDNET, for messaging and computer conferencing, and for producing a journal and a course, both in electronic form; and (d) issues a newsletter and a variety of reports.

The research effort focusing on information dissemination to adult educators in developing societies is a further component of the Kellogg Project and it forms the topic of this paper. As the project proposal hovered between ideas and drafts, it became clear that its international orientation could not be fully realized without a special activity dedicated to the belief that in developing societies there is a great

richness of creativity and professional experience along with an appalling weakness of the information technology infrastructure. For example, I have seen a concept paper on the rural diffusion of innovations in Botswana, and another on the information needs of small enterprises in the People's Republic of China, each radiating such vision and lucidity that one felt exalted reading them, until one came upon the part describing the lack of managerial and technological backup.

There is no dearth of inventiveness and substantive stock of knowledge in the regions that are in the process of economic development. International information programs that are limited to one-way information dissemination without involving the "recipients" in contributing their own knowledge to the international discourse, miss an important opportunity. It is a credit to the Kellogg Project that the International Information Sharing Network (IISN) and the service of Information Counseling (IC), both coordinated by Beth Oddy, became a reality. It is a credit to the Center for the Study of Citizenship that it perceived in information transfer a potent and controversial agent of social change and that it initiated a crossdisciplinary discourse about the international role of information.

By describing the role of an interactive human resource network in passing knowledge from, to, and among distant participants and the model of the advising service that attempts to span cultural pluralism, physical distance and gaps in communication systems by its nonbureaucratic person-to-person approach, I hope to contribute to the continual probing of such questions as posed at the beginning of this paper.

TIMELINESS OF THE RESEARCH

For many years, I have been examining and thinking about the attributes of "information connectedness" and ways people attain it. The theme has been winding its way through several of my research projects, never forming the exact focus, but

never being too far from the center. I came to think of information connectedness as the result of two intertwining processes: (1) the provision of information by one individual (sometimes by counseling and other times by spontaneous and informal action), and (2) the receipt, scrutiny, acceptance, application, and critique of the information by another person. Under favorable circumstances, the recipient often reciprocates by sending new information as his or her contribution to the dialogue.

In face-to-face situations this process is never as linear as described here, but the greater the distance between the participants, the more sequential the exchange becomes. After all, letters usually follow each other, telex messages follow each other, and even interactions by computer follow each other. Information connectedness is a dynamic relationship in which each party gives and gains something.

Why, then, are both development and information specialists skeptical about the possibility of "connecting" over cultural and political distances? (Bannon, Barry and Holst, 1982; Bell, 1986; Hattori, 1986; Lucas, 1983). Critics speak either against the futility of attempts to identify information needs from a distance, or against the possibility of inadvertently creating a dependency relationship with recipients. This means that information (given or received) is considered either too powerless to make any difference or too powerful to avoid domineering. Maybe the explanation is that neither critics nor enthusiastic advocates of long distance information transfer know enough about the process.

At the Kellogg Project we decided to go ahead and create the service against all odds, because we wanted to inform and be informed in order to help and learn at the same time. As Scott-Stevens (1987, p. 171) suggested, "the most effective, and 'ideal' transfer of knowledge is one in which both parties learn something...".

Additional motivation came from several considerations, each of which contributed support for our project. We began with the following assumptions:

- o Organizations engaged in technical aid perceive adult education practice and research as significant resources for socioeconomic development. The warning that "Educational strategies must be part of an overall development strategy..." (Simmons, 1979, p. 1014) can be heard throughout the development discourse.
- o In spite of this view at the international level, adult educators in developing countries find it difficult to participate in society-wide discussions, perhaps because they are not seen by policymakers as perpetrators of technological progress.
- o This image is beginning to change in the modernizing industrial sectors where the value of lifelong education for managers and technologists has been discovered (Ajuogu, 1981).
- o Similarly, the traditional low profile of the information specialist is beginning to shift to that of a more visible actor as governments in many countries turn to the task of drafting telecommunication and information policies (Wesley-Tanaskovic, 1985).
- o Although the technological infrastructure of education, information and telecommunication remains weak in economically hard-pressed countries, awareness of its key role in the economy is on the rise. It is now widely understood that before nations can develop their own research and development sector, human resources must be strengthened.
- o It is at the crossroads of these trends that innovation in adult education by the increased use of information seems to be within reach. What people desperately miss in many societies is the possibility to change conditions.

Even though a long-distance information counseling and networking service is but one tiny contribution to this new and yet very fragile hope in developing countries, its introduction seems almost astonishingly timely. A study of the service, furthermore,

provides insights into the relationship of adult education and the communication of information.

We have to emphasize that information dissemination is only one dimension of this effort. The other, possibly more significant, objective is to create a flow of information sharing with the active participation of adult educators - practitioners, policymakers, researchers and program managers - in developing regions. Indigenous experience and knowledge in grassroots development and institutional change form an invaluable resource in each country that might be shared with colleagues in other regions. Through referrals among network participants and a newsletter, the project has the capability to support local creativity and initiative. Information isolation is a serious barrier to development communication. By alleviating isolation and promoting human linkages even in small, incremental steps, the International Information Sharing Network (IISN) has the potential to act as a conduit for increasing information exchange in which adult educators in developing countries play the dominant role.

The following reflections represent only my own views and are intended as a basis for discussion and joint planning. My observations about information transfer and its relationship to adult education and development are offered with the crossdisciplinary environment of the Kellogg Project in mind. They are meant to invite suggestions and constructive disagreement. This background paper does not address the important knowledge area of information systems and the innovative thinking that led our colleague, Robert N. Oddy, to the concept of the workstation, a key component of the project. He will speak on that topic at another time.

REFLECTIONS ON INFORMATION

The genesis of the words "information" and "inform" embodies an ominous symbolism. Almost all of the modern social connotations and anxieties of the

information age were already present in the Latin "information;" it meant "image" as well as the process of "giving form or shape" to something. The verb "informare" denoted not only "to form or shape" but also "to instruct and to educate." There was an implication here of a conscious attempt to influence the thought process, to transform ideas, to change opinions. Today, even if we claim objectivity and neutrality in respect to the creation and transmission of information content, if we had a way of testing, we might find few messages without at least some degree of motivation to form somebody's thinking.

Conceptually, the interpretation of the meaning of information for social and personal life depends on the context of the research discipline where the discourse on the characteristics of information originates. Many scientists agree that raw and fragmentary data can be transformed into finished and usable information in the framework of a user's situation and need (Repo, 1987, p. 4). There is less agreement on the nature of knowledge, which I like to define as information fused in the human mind with creative intuition and experience.

Beyond these basic descriptions and relationships, definitions of the nature and role of information fan out into a voluminous literature encompassing the research fields of several disciplines. The focus on information phenomena shifts from the process of informing in anthropology to the relationship between information and uncertainty in the firm's environment studied in management science, the value of information in economics, and communication between source and receiver in communication science, just to name a few. Research in a few interdisciplinary areas, particularly cognitive psychology, linguistics, diffusion of innovations, and knowledge utilization, is committed to explore the patterns of thinking, expressing, interacting, problem solving and applying information at the subjective human level.

With the exception of the latter directions, most definitions underlying earlier theories of information retrieval and dissemination miss the fact that information and

knowledge can be either objective or subjective. Information phenomena must be verifiable and measurable in order to be tested. Scientific information lends itself readily to this criterion and forms the conceptual basis of much research underlying the design and evaluation of information retrieval systems and dissemination programs. But then, why are information systems meeting human communication needs with such questionable results? Why do the outspoken critics of the performance of information retrieval abound? Are there idiosyncratic approaches in the ways people seek information that systems fail to anticipate? This dilemma, in both its technological and psychological aspects, has challenged many fine minds and it led to investigations in a number of disciplines. These studies, pertinent as they are, cannot be covered in this paper. But I will indulge in a reference to Winograd and Flores (1986, p. 16) who, having studied the research area of computer science in general and artificial intelligence in particular, said, "Current thinking about computers and their impact on society has been shaped by a rationalistic tradition that needs to be reexamined and challenged as a source of understanding."

The act of information exchange with adult educators in developing countries is not only a scientific but also a political and cultural problem that brings questions of rationality into direct interplay with questions of cultural relevance. This circumstance alone is capable of creating an almost painful ambiguity as project environment. As researchers years ago observed: "The vocabulary of science is elaborate and specialized, but objective and factual; that of politics is more everyday, and is centered on value judgments" (U.S. Congressional Research Service, 1971, p. 5). Moreover, our project deals with ambiguity also at the international level because the information that passes to and from an adult educator in Kenya or India and the Kellogg Project is characterized not only by technical features but also by an intercultural relationship.

We cannot but accept that subjective and unpredictable factors influence the course of each information transaction. It does not suffice to deal with project activities

at the level of systematic facts, no matter how carefully and objectively collected, organized and synthesized. Information is activated by its use. In its use and by its application, information can change its meaning. We recognize that the challenge of two kinds of information - the rational/technical and the intuitive/personal - that pass through the international network, is upon us.

THE LEARNING ORGANIZATION APPROACH

The geographic distance creates a problematic environment for the design of international programs of information delivery and dissemination. Three factors produce unorthodox circumstances: Information requirements and needs pertain to a faraway and literally unexplorable user situation, direct interaction with information requestors is impossible, and what long distance interaction exists may be hampered by the cautiousness and reserve of participants. While trust between users and transmitters is always a significant conduit of information delivery, it is especially critical in intercultural programs.

Information production, dissemination and application form a continuum. Caplan (1975) outlined some of its phases as diffusion (the dissemination of research findings), utilization (putting knowledge to work), and application (knowledge that has an effect on action). A crucial link, however, was missing from this model. We suggested that the acceptance of information was the basis of all further actions by the recipient: consideration of the message, selection of the content or parts of it, use, learning, integration with what is known, judging the information's relative value, and its application to a task or problem (Brindle and Dosa, 1980, p. 3). Although it is possible for people to become aware of the content of a message without the conscious act of accepting it, the application of new knowledge can hardly be successful without its acceptance by the applier in the cultural as well as the intellectual sense.

The concepts of trust and information acceptance are not factors usually considered by the planners of dissemination systems. But for many users, the important question about information concerns not the process by which it was produced and transmitted, but the person who produced or transmitted it. The central role of trust and of the acceptance of information possibly account for the formation of tight cliques in most societies, for talking over important matters. Maruyama (1988, pp. 67-68) alluded to this problem in describing the practice of excluding foreigners from decision making groups in multicultural corporations. Scott-Stevens (1987) analyzed the expressions of trust and their impact on technical aid projects.

When we accepted the notion that the feelers of a formal need-assessment study might not reach below the surface of generalities, we adopted the model of the learning organization as the most viable approach to a situation where systematic long-range planning held little promise. The concept is well known in development and technical aid studies. Criticized as too idealistic, the approach has nevertheless penetrated several community development projects in Southeast Asia and other areas. In an organization in which learning is a conscious act, an atmosphere of openness encourages staff members to exchange their ideas, their experiments, even their errors and renewed attempts to bring goals and actions into harmony (Korten, 1980, p. 498). This corresponds to our vision of a project that continually learns from participants, information users, and its own accumulating experience.

INFORMATION FOR SOCIAL INTEGRATION?

Adult educators are in the forefront of development activities in rural areas, communities, the congested urban centers, and the poverty-stricken urban fringes. They are involved with provincial and central governments and increasingly play a role in people's reach for independent existence through small and medium-size private enterprises. Privatization, a recent trend in developing countries, will need the

concerted efforts of education, particularly nonformal adult education, in creating programs for new work-related skills and practices (Bande, 1985). The Development Assistance Committee of the Organization for Economic Cooperation and Development reported that in the Committee's discussions on poverty and equity "the point was made that the informal private sector plays a critical role in development and should be encouraged" (OECD, 1988, p. 25). Training in financial management, organizational communication and the coordination of diverse activities in business ventures is needed at several levels.

Another phenomenon, evident in the entire range of development experiences, is the growing technology orientation of societies. In markets or in government-subsidized projects, information and communication technologies create a climate in which the problems of a fragmented infrastructure and the lack of coordinated policies become painfully real. Existing institutions are faced with changes which could not be anticipated and built into the education system (Martin, 1983; Nettleford, 1982).

Since the main goal of our project is to provide information support to adult educators in the midst of this social transition, we have to ask again and again "What are the propelling forces in change?" They are economic and technological necessities, cultural drives and human needs. Although we cannot develop an adequate understanding of the environment of each participant in the international information sharing network, experience with development projects brought a certain perspective on the broader institutional picture. It became quite clear that the introduction of innovations in education and information activities are related to, and in some countries integrated with, national development plans (UNESCO, 1983; UNESCO, 1985). The factors that affect the economic and social development process, also determine the possibilities of information transfer.

Cutting across all sectors, three main forces exercise a potent influence on crossnational communication. First, the same economic determinants that drive

institution building and the acquisition of technology, also motivate the acquisition of information. Concerns for more favorable trade relations and for the strengthening of indigenous inventions are interwoven with efforts for literacy programs, the growth of vocational education, and the establishment of national centers of productivity and technological information.

Second, the tension between domestic poverty and regional and international competitiveness is beginning to leave its mark on social life (Kranzberg, 1985). The slowness of institutions to react to the need for change can be especially harmful in cases of information-based agencies, regulating bodies, policymaking ministries, curriculum committees and cultural councils. Scientific as well as political information is needed to warn of and to prepare for change. The gap between the foreign-educated and their peers as well as the gap between the information affluent and the information deprived hinder the evolution of modern information systems and services. However, even a cursory familiarity with universities and research institutions will help to realize that local creativity has not been held back even by the lack of funding and weak research infrastructures. As the realization that information is not merely a support to, but actually an organic part of research production and dissemination grows, people engaged in these activities will become more interdependent.

Third, a trend towards popular participation in development and societal planning poses a new challenge to adult education programs (United Nations, 1987). There are more people aware of alternative ways to a better quality of life and of the value of cultural identity than ever before. These trends produced an unprecedented need for information policies in all developing countries.

We can identify some of the institutional forces behind the transformation of Third World societies, but we cannot easily define the international network's policies towards these forces. If information transfer is not a neutral agent in intercultural work, how can we avoid involvement in the internal educational and information processes

in developing countries? As social integration progresses in a community, or in a region, will information provided by the counseling service support the individual information user or the larger process of social integration? In other words, is it for the individual adult educator or for the social environment that a cultural bias inadvertently attached to an information transmittal might represent a certain amount of damage? In the following observations on the paradigms used by our project, some of these questions may become clearer and more answerable. The two main paradigms are information networking and counseling.

INFORMATION SHARING NETWORKS

Many groups and individuals fail to define their kinds of networks when they start them. At the present there are probably as many assumptions about the nature of networks as there are people involved in them. For example, consider the difference between these two descriptions:

A personal communication network is those interconnected individuals who are linked by patterned communication flows to a focal individual (Rogers and Kincaid, 1981, p. 347).

The network is the institution of our time: an open system, a dissipative structure so richly coherent that it is in constant flux, poised for reordering, capable of endless transformation (Ferguson, 1980, p. 213).

The network concept has been used in interpersonal, intergroup, interorganizational and intersystem relationships. A human resource network means

the mutual support mode of sharing experience and knowledge. The same individual may participate in more than one network. Unpublished information sources are often exchanged on the basis of personal contacts and trust. The effectiveness of information sharing depends upon political, psychological and cultural factors. Research carried out in several disciplines resulted in the now familiar concepts of kinship and social support networks, invisible colleges, learning networks, personal communication networks, diffusion networks and interagency linkages. Messages vary from confidential dialogues to formal large-scale dissemination to participants, and they can cover every possible subject.

Development and coordination of a centralized or semicentralized network require not only the usual administrative decisions but also the resolution of additional policy issues. These are especially demanding when (1) nonelectronic networks are computerized, (2) electronic networks assume new roles and responsibilities for the coordination of information flows, (3) informal networks grow and either fragment or formalize, and (4) a network has to use mixed media because some participants have access to electronic communication while others do not. Policy considerations which can keep a network from deteriorating into chaos include the extent of coordination; eligibility to participate; equity of access; quality control; the credibility and validity of information shared; ownership of ideas, software or data; confidentiality; free or fee-based participation; language problems and, above all, the relevance of information disseminated through the network.

The complexity of information laws and regulations grows in proportion to the technological sophistication of networks. Some forms of network applications which enjoy growing popularity - electronic mail, bulletin boards, teleconferencing - are way ahead of research on their social impact and concomitant policies.

Human resource networks may be created in two ways. The person-to-person (snowballing or chainlinking) approach starts with a few contacts and grows in an

informal and unstructured way. The other method is a systematic search through directories, registers and membership lists of associations. The first approach results in a spontaneous and heterogeneous network that cuts across different professional roles, programs and geographic regions. The second, more comprehensive method, would have to be limited to certain countries or to certain adult education roles in order to avoid a huge and, by its size, self-defeating network.

The most difficult problem in information sharing is to achieve equity of access. Adult education programs in low-income countries have a critical need for training skills and teaching materials acceptable by the local culture. However, a vast gap exists in each country between large-scale information systems introduced by the government or foreign consultants and community educators and developers. Human resource networking and information sharing within a country is a mode of community learning that is more likely to gain the trust of the local participant than the large-scale official infrastructure.

How was the paradigm of networking applied by our project?

The International Information Sharing Network is being developed:

1. for the purpose of information dissemination and sharing,
2. in a semiformalized mode (the information dissemination being coordinated by the information counselor but information sharing among participants carried out either through formal or informal contact), and
3. using mixed media (nonelectronic and electronic depending on the participant's choice).

We opted for the person-to-person process. International directories tend to perpetuate hierarchies of the educated elite of developing countries. We felt that the informal recommendations extending contacts step by step have more of a chance to reach not only ministries and universities, but also extension programs and community groups. Chainlinking also tends to reach a wider variety of roles in education activities.

INFORMATION COUNSELING

For some people, "information" has the connotation of opportunities and the ability to make choices. For others, information means a maze of chaotic messages, meaningless facts and impersonal organizations and systems which "never respond to human need." Practitioners in developing countries, many of them part-time trainers and volunteers, work in extension services, evening classes or nonformal rural settings where neither time nor resources allow for institutional information gathering. Experience passes verbally from person to person. This process is the very strength of informal communication, but it also misses potentially useful resources. For example, planners, researchers and program administrators indicate that they often need demographic and socioeconomic data for their work. They soon find that internationally-sponsored data collection efforts are often modeled on large-scale prototype projects requiring special skills to adapt them to local settings. The alternative is primary data collection, an expensive and time consuming activity. Much unnecessary primary data collection has been initiated where a perceptive search could have identified resources of existing data.

The process of "informing" seems to be the answer to such problems. Many kinds of "informing" take place in education programs, social service agencies, extension programs and libraries. Information counseling is a new approach that has been developed by drawing on the best features of several guidance models. It provides in-

depth and personalized assistance in the acquisition, use and application of information and data. It is an interactive process by which an information specialist determines the optimal way to meet the information requirements and needs of individuals or organizations and assures follow-up in order to evaluate the effectiveness of assistance (Dosa, 1978). Although information systems have become more user-friendly, the complexity of information resources and products necessitates a more individualized advising in converting them into usable packages.

"Good" information is relative. It depends on the cultural relevance and acceptability of its source, the circumstances of its potential use, as well as its timing, form, quantity and level of technicality. Information counseling for adult educators in developing countries deals with some or all of the following sources:

- Primary data, the raw materials of factual information appearing in the databases and reports of international organizations and technical assistance programs, and the statistical compilations of governments and NGOs.
- Analyzed and evaluated data in development plans, compendia, summary project reports and scientific papers.
- Interpretations of data and comments on their implications embedded in government reports, professional responses, published policy papers, editorials and commentaries: the opinion literature.

- Current educational materials such as teaching tools, textbooks, software, syllabi, program descriptions, manuals, tests and tutorial sources.
- Historical materials in manuscript collections, monographs, papers and lectures.
- Personal expertise in organizations, professional societies, educational institutions, communities and local programs.

In the context of development, information is the vehicle of technology/knowledge transfer. There is abundant evidence that this process succeeds only if carried out bidirectionally. Formation of the information sharing links can lead participants to the recognition of their own priorities; it can motivate local creativity by helping trainers, animators and organizers to find out how other programs are doing.

INFORMATION REQUIREMENTS AND NEEDS

Informing cannot be effective without the information counselor's understanding of the nature of information requirements and needs of potential recipients. When people respond to questionnaires or interviews probing into their information needs, they can express an interest only in the kinds of data, expertise and resources of which they are aware. They feel that they might use such support for their work or everyday life, so they require it. These kinds of wishes and demands are information requirements. On the other hand, people might feel frustrated by carrying out a task or making a plan because something in the way they picture these decisions is missing. They might have an information need, but they are not aware of it.

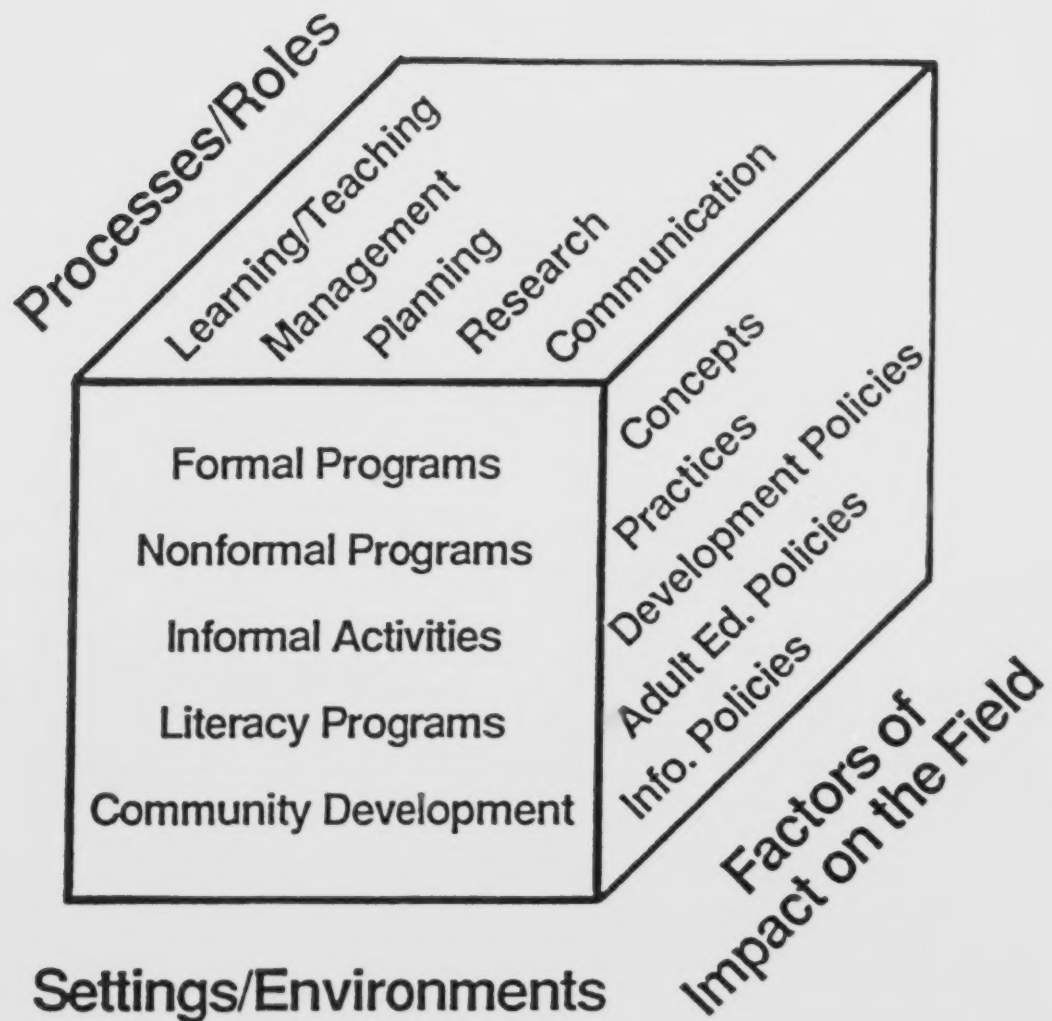
Formal information need assessment by questionnaires presents a problem even in a homogeneous social and psychological environment, let alone in a different cultural setting at a considerable distance. Conceptual interpretation of questions might be different enough from those of the researcher to render responses less than useful. Information requirements can be identified and needs can be approximated only gradually, in the course of interaction, counseling and information provision. There are alternative approaches to eliciting information requirements and developing a "feel" for unspecified information needs. In nontechnological environments verbal communication and, in distant relationships, the personal letter are still the most valued means of contact. For example, personal letters by the information counselor to network participants express interest in their work. Responses are likely to bring to the surface a variety of information requirements and a few hints at needs implied by the respondents' work environment and task-related problems. Letters then are analyzed by the counselor, and categories of "requirements" and tentative "needs" are charted. The results are usually more revealing than data extracted from questionnaire responses.

Unspecified and unexpressed information needs may be approximated only as one would map a distant land based on hearsay and secondhand experience. For example, an analysis of working conditions, tasks, struggles and aspirations of adult educators described in country case studies serve as a guide to information needs. A discussion of the training of community development extension staff for government ministries and non-governmental organizations in ten Eastern African countries reveals that "international sharing of experiences, skills, resources is encouraged through joint training at subregional and regional centres ..." (Nturibi, 1982, p. 113). From a summary of a survey of nonformal adult education at Commonwealth universities we learn that there is a need "to develop a human resource data bank which would include the names and institutions of those with considerable experience

in nonformal education and development, both in developing and developed countries ..." (Draper, 1986, p. 73). In a third case, we are told that "What perhaps lies at the root of the crisis in educational sciences and educational research is their lack of relevance to the development of individuals and societies. New forms of interdisciplinarity are necessary to meet requirements..." (Gelpi, 1985, p. 252).

FIGURE 1 indicates the parameters of the information service, that is the scope of major areas of practice, policymaking and research in adult education. FIGURE 2 is a rudimentary outline of adult education roles, types of information requirements, needs one can infer from these roles, and potential resources for information counseling.

Figure 1



The Knowledge Base of Adult Education in Developing Countries

Figure 2

Information Requirements and Referral Sources

<u>Potential Users</u>	<u>Type of Information</u>	<u>Sources</u>
Teachers Trainers Animators Counselors	Course outlines Workshop topics Text of lectures Teaching materials (AV, computer software) Textbooks Evaluation tools Course catalogs Human expertise	National organizations Regional organizations Professional associations
Program administrators Managers Coordinators Consultants	Management techniques Analytic tools Assessment methods Evaluation methods Funding sources Experience sharing Basic approaches Marketing methods	Intergovernmental agencies NGOs Clearinghouses
Planners Policymakers Program sponsors	Planning models Policy statements " reviews " studies Demographic data Socioeconomic data	Networks Databases Libraries
Researchers Evaluators Historians Higher educators	Research reports Journal papers Conference papers Historical sources Archives/Records Data for secondary analysis	Archives Special collections Adult education programs Specialists' expertise

Evaluation of the information service is being assisted by two kinds of data collection. Each query and the answer to it are analyzed for the nature of the requirement, implicit needs, and the mode of response. This "monitoring" information is stored in the system. The other round of data collection will inquire into the perceptions of users. Conceptually, the assessment is based on the approach used by some technical assistance projects, a combination of ongoing monitoring and retrospective evaluation (Cernea, 1979, pp. 15-29).

ADULT EDUCATION, INFORMATION AND DEVELOPMENT

In 1980, the International Council for Adult Education established a Commission of Inquiry into Adult Education and Poverty. The question was raised, "How far was a separate identification [of adult education] necessary to enhance the contribution of adult education, given that integration into other development strategies and programmes appeared crucial?" (Duke, 1986, p. 31). This important effort of the Council was excellently timed. Professional associations and "donor agencies" were questioning the effectiveness of international aid. It was widely recognized that interventions and changes introduced in developing countries had not brought the world closer to bridging the gap either between the poorest and the economically-advanced countries, or between the poor populations and the elite within the same country. Moreover, interventions aimed at the poor, even if accepted by local people, have not been sustained.

Following the 1973 amendments to the Foreign Assistance Act of 1961, the United States Agency for International Development introduced its "New Directions" policy almost simultaneously with similar changes in World Bank orientation. The mandate stressed assistance to the poorest countries and projects that made every effort to mobilize indigenous local participation. The "basic needs" strategy of development, initiated by the World Employment Conference sponsored by the International Labor

Organization in 1976 and adopted by many aid agencies, demanded that action be directed toward adequate food, shelter, clothing, basic services, health, education and employment (Streeten, 1981). Thus development policy became a major guiding factor in technical assistance planning for adult education, literacy and community development in the Third World. Although recent development aid policies of several major agencies all but abandoned the basic needs approach in favor of assistance directed at the development of markets and at the strengthening of the economic base of struggling countries, the philosophy that had originally undergirded the basic needs policy remains a strong influence upon the work of many development organizations and specialists.

Experience-based case studies as well as the theoretical development literature recognize the lack of knowledge about the conditions of the poor and about their capabilities to use education and information for improving their quality of life as one of the most critical problems in rural development projects. Srinivasan (1977) proposed that characteristic conditions of the poor - especially low income or unemployment - could be measured by people's lack of access to opportunities in education, nutrition, preventative health care and information about services. He held that unless a society provided channels and assistance in using coping information, access to opportunities remained a haphazard matter favoring the educated elite who are better equipped to "find out" on their own. The provision of information, asserted a development specialist, was one of the basic human needs (Pradervand, 1980).

As indicated before, public policies for national information systems are beginning to converge with economic planning in developing countries. UNESCO and the International Bureau of Informatics (IBI) have been sponsoring high-level expert meetings on the integration of information policies into national development plans in countries as diverse as the Republic of China, Hungary, Mexico, Sri Lanka, Venezuela and Yugoslavia. Unfortunately, in most countries the distance between politicians and

specialists on the one hand and practitioners in small organizations and communities on the other is still as wide as ever. The planning of information infrastructures is usually top-down and dissemination by development projects is one-way rather than participatory. The observation made ten years ago is still valid:

While the quick, airborne missions of international staffs were very appropriate when the focus was on modern, organized, high technology segments of Third World societies, they may prove quite ineffective in the context of designing poverty redressal schemes requiring long and patient study (Gulhati, 1977, p. 362).

Nongovernmental organizations (NGOs) generally acknowledge that one of the main indicators of the quality of a grassroots-oriented project is its capacity to integrate education and information activities with socioeconomic development goals (Hall, 1986). In 1985, the Fourth International Conference on Adult Education emphasized the education and training of personnel as "the biggest challenge facing the field" (Boshier, p. 3). Subsequently, ICAE initiated a special issue of Convergence on training problems. These papers have contributed to the creation of a theoretical framework, and country surveys have provided a wealth of insights into the working conditions of adult education practitioners (Berstecher, 1985; Buttedahl, 1985; Ellis, 1985; Hunter, 1985; Pick, 1985).

The concept of community development as a learning process was explicated by Korten (1980); Marshall and Peters (1985); Morgan and Ramirez; (1985) Roberts (1979); and Okafor (1984). The assertion of indigenous values and local cultural sovereignty as they clash with foreign communication dominance was explored by the International Commission for the Study of Communication Problems (1980), Smith (1980) and Stover (1984). The picture that emerges from this literature presents a complex but coherent background for reexamining the community developmental role of information transfer in a separate project paper.

AWAKENING FROM INNOCENCE

The community of information scientists harbors a heterogeneous breed representing contextual microcosms of service, business, research, technology and policy orientation. These microcosms of values pull information scientists in numerous directions, and occasionally create a conflict of commitments or successful boundary spanning within the professional life of an individual. Service orientation is more a state of mind than a career choice. It can be awakened but not taught. It is the least exclusive of the many microcosms of values; indeed, it is often combined with research or technological applications.

For nearly four decades, information specialists with an international and service orientation and representing skills ranging from statistics through librarianship and teaching to administration, have been undertaking projects in or on behalf of countries that have emerged from colonialism. The history of foreign consultancy in this field is long and colorful.

In the past, one of the main rewards of service to developing country populations consisted of assumptions about the beneficial nature of information transfer. The picture of the world in which information moved from knowledgeable consultants to information-starved recipients was relatively simple and comfortable. Most (albeit not all) information services created for developing countries were motivated by good will, planned by the providers, implemented on the basis of a schematic and often inflexible design, and evaluated with the underlying conviction that possible flaws in the service notwithstanding, the information per se surely did lots of good to its users.

The emergence of the "basic needs" policy, with its insistence on the local participants' active involvement in project planning, design and implementation, has quite roughly intruded on the innocence of information service providers. The rise of disturbing doubts about "information" itself, its validity, credibility, appropriateness and relevance to the users, has shaken the remaining innocence of well intentioned

service consultants. Advocates of the "basic needs" philosophy tried to turn neat project designs into revisable and open-ended processes. A new corps of information and communication scientists in developing countries came forth with a diagnosis of cultural imperialism in the form of sophisticated information dissemination programs and effectively packaged messages. Management information systems were criticized for being centralized in ministries, the production of unnecessary data, emphasis on technology, excessive complexity, lack of capability to identify problems in project implementation, and the failure to disseminate reports (Mickelwait, et al, 1978).

The resentment of local leaders against planning and communication patterns introduced from top down included not only central governments and foreign advisers but also expatriate consultants. Recipients of rural extension services and information dissemination programs often felt that the information they received was tainted by foreign cultural connotations (Prajuli, 1986). Participants at a high-level seminar in Mexico, jointly sponsored by the Aijic Institute of International Education and the International Council for Educational Development, commented that "... in communication as in education, the high-tech hardware, such as computers and satellites, is starved by lack of software, or content" (Hechinger, 1985). International trade relations as well as cooperation between information professionals became affected by political and economic controversies over international data flows (Konoshima, 1986). By the mid-1980s, the awakening of service-oriented information consultants was nearly complete.

INFORMATION AS DEVELOPMENT ASSISTANCE

Many factors contributed to the transformation of the information provider's enthusiasm into disillusionment. Questions were raised about services, research and policies. Who has access to the systems? What is the difference between barrier-free information service and service free of charge? Who collected the data, under whose

sponsorship and for what purpose? Who owns the data in a locally produced database: the sponsor agency or its local counterpart? What is society's responsibility for making information available; who are the information poor, and what is "equitable" access? How can service providers identify "appropriate" information for transfer? The implications of these probings for the crossdisciplinary discussions generated by the Center for the Study of Citizenship in cooperation with the Kellogg Project are considerable.

For purposes of the project, we defined development as positive changes permeating the entire fabric of society and the quality of human life. Such changes, including economic, technological, cultural, social and political dimensions, are only partially measurable either quantitatively or qualitatively. However, a growing volume of research is available on alternative measurements applicable to basic human needs, income distribution, the quality of life, the quality of the environment, etc.

The problem with the above definition is that the term "positive" is relativistic and ambiguous. What is "positive?" From whose benchmark is it envisaged? If the top elite of a country rises to relative economic security, is this a "positive" change for the large masses of the population who are not sharing the benefits of development? Obviously advocates of "trickle down" theories will answer in the affirmative, while development practitioners, who consider meeting the basic needs of the poor the measure of development, will respond negatively.

The term "positive change" may be interpreted only within the framework of assumptions, used by each movement, each social group, and each individual. It is with this understanding that the expression "positive change" can become acceptable as part of the definition of development. People (policymakers as well as all those affected by policies) have to define development themselves before others define it for them (Kassam, 1986; Krueger, 1986).

This relativistic approach to the definition is used because of the absence of any cohesive, theoretically based and generally accepted definition of the development process. Nor can we fall back upon a universal philosophical grounding for technical assistance for development. The moral argument has always been present in the history of development aid, but it has been applied mainly on an ad hoc basis without a comprehensive ethical system. Riddell (1986, p. 25) argues that

"What is perhaps most surprising, given the prominence that aid has had in the development literature and the vigour with which aid advocates have appealed to morality in lobbying governments to increase aid allocations, is that there has been little or no attempt within that literature to provide a systematic and rigorous analysis of the ethics of aid."

As we lack comprehensive, internationally accepted ethics of development assistance and search in vain for a standard definition of development, the concept of "positive change" has to be interpreted by each sector of the economy and each field of professional practice, including adult education. Against the background of the development environment, many adult educators are rethinking and redefining their roles.

The adult education and literacy movements in Third World countries are in constant flux. Among the innumerable small- and large-scale efforts one can distinguish two main trends which sometimes seem to run on a collision course and at other times mingle and overlap. One strong thrust, propelled by academic educators and government planners, aims at professionalization, quantification, and the introduction of high technology. The other direction emphasizes indigenous and community forces and cultural heritage. In terms of information provision, these trends represent two broad categories of needs and requirements. The need for technical

and demographic data, models of systematic planning, analytic tools to be adapted to local management practice, psychological studies on learning, and standards of professional performance are evident from the literature. At the other end of the spectrum, strong arguments are voiced for culturally relevant knowledge, social learning, participatory research, information on people's perceptions of the quality of life, and movements promoting self-learning and self-help.

The day-by-day human existence in rural areas, suggests Medlin, should form the basis for education planning. "What better place to start than by examining the contexts in which the consumers of knowledge must struggle for improving their often miserable existence?" (Medlin, 1983, p. 32). Equality in the availability of educational opportunities is a primary goal of planning (Lourie, 1985, p. 250). Gelpi believes that "disparities existing in education [are] aggravated by the concentration of information processing facilities ... and by living conditions (Gelpi, 1985, p. 149-150). The strengthening of local capacity for applied research plays a dominant role in the aspirations of innovators (Hall, 1981). Urevbu (1985) relates the need for scientific information to adult education policy, and Kidd (1981) points out existing problems in need of systematic investigation.

Part of the information problem in developing countries is the lack of social intelligence concerning trends in technology transfer, indigenous technology development, and the social impact of each of these processes. The following are a few examples of information technology-related trends, implicitly arguing that strengthening the information base in this area, indeed, represents aid to overall development:

- o As information and communication systems are introduced, they create a profound need for the clarification of their social impact and for the conceptualization of their application to development activities.
- o The fundamentals of the development process are being reexamined to assure the relevance of training in information provision and use and in the selection and management of computer and telecommunication technology.
- o Interest in the cooperation of various disciplines is getting keener and is being supported by information sharing, computer conferencing and electronic mail where the infrastructure is available. Counseling must raise awareness of the potentially adverse impact of these communication devices on information equality unless adult education and other professions help to spread their benefits.
- o Governments and several professions are turning their attention to the economics of information and privatization of production and programs. Transferring responsibility to private companies is a new trend, giving rise to new and as yet poorly understood information needs (Bande, 1985).

- o A growing number of policymakers urge development of a core of indigenous social science researchers in communication and information technology, but researchers lack basic resources and contacts with their counterparts abroad.
- o Interactive community learning processes, up to now overshadowed by large-scale modernization projects, are gaining importance but are lacking access to information resources and systems.

In the light of these trends, maybe one of the most crucial questions with direct relevance to the Kellogg Project is: If information transfer is a form of development assistance, how can the advisement service and the information sharing network deliver culturally and professionally relevant information without imposing foreign values on adult educators in an African, Asian or Latin American country? A few specific examples might illuminate this quandary.

First, we recall that the classification of adult education goals by the outcomes of programs encompasses the following: social integration (concerned with acculturation), social responsibility (concerned with citizenship), social change (concerned with transformation), and technical competence (concerned with skills) (Boshier, 1985, p. 13). Perceptive as this classification is in the American context, it could not be adopted for an intercultural information project without considerable difficulties. Information transfer is not a neutral intermediary function. Even if an information counselor made every effort to avoid personal judgments, the information resources he or she uses are full of cultural assumptions and interpretations of facts, events and situations. Should information concerning social change be provided to

adult educators in foreign countries, would it be construed as assistance for achieving social change, a process seen as interference in other cultures?

Second, we turn to the example of assistance in the uses of communication technology by manuals and teaching tools. While competence in computer-aided instruction or database searching is a positive goal of information counseling, one needs some familiarity with the level of the technological infrastructure in the recipient country. One of the adult education roles which needs a great deal of information support in every country is that of the technology evaluator. In this context, "technology" includes software, hardware, specifications, cultural factors in selection, social skills in introduction and popularization, programs, impact on learning, and training. We may expect that technology assessment will represent a field of competence of growing significance (Ghosh, 1984; Srinivasan, 1982).

I will develop the third example in somewhat more depth. I do this with particular regard to the Kellogg Project's commitment to historical research. In the rural areas of developing countries, the past of the culture survives in oral history and traditional forms of communication; in the urban centers it is concentrated mainly in museums, archives and ethnic crafts whose value has recently been discovered by both scholarship and tourism. All approaches to the preservation of culture need a conceptual foundation and state-of-the-art methods, and thus they can benefit from information sharing. Information support to adult educators who are involved in rural development is probably one of the most sensitive forms of assistance. Awareness of the issues surrounding this work will add to our understanding of the information environment in developing countries.

Until recently, national development plans placed little emphasis on the role of local cultural expressions and informal networks in social transformation. High priority was accorded to large-scale projects, with foreign technical assistance concentrated in ministries and other national institutions. Centralized mass media were the preferred

channels for development-related messages. Today, it is beginning to be accepted that social and human resource development must embrace all spheres of human activity including oral, pictorial, and written expressions of local tradition (Odak, 1985, p. 9).

Many donor agencies are making serious efforts to involve the local population in development project planning and implementation. Colletta (1977, p. 14) observes that "... a bridge is needed between development agents and rural people to facilitate the transfer of information, skills and attitude-sets relevant to village development." This bridge is discovered in traditional media: folk songs, dances, theatre, tales, poems, proverbs, riddles, and, for example in India and Indonesia, puppet shows.

Cultural resource management is a new interdisciplinary field of study and practice that is just beginning to attract some attention in the Third World. Development practitioners in this field see knowledge in any form, deposited in archives, accumulating in village records or handed down from generation to generation as oral heritage, as a national resource. A recent international document signals changes in developing countries' attitudes toward archives: "As archivists we should not see ourselves as working in isolation serving small esoteric 'publics' but as part of a cultural environment upon which humanity depends for survival" (Taylor, 1984, p. 1). Another specialist noted "...the emergence of a new phenomenon in many countries: the curiosity of the general public about archives and, more generally, historical documents" (Duchain, 1983, p. 9).

Based on the value-laden nature of information we are contemplating in this paper, the concern about inadvertent dominance arises once more. Does information support to cultural policies in a developing country represent interference in internal affairs? Let us assume for the sake of argument that two leading adult educators in a country hold opposing views on the role of the cultural heritage of diverse ethnic groups in national development. One of them argues that indigenous customs raise

obstacles to modernization, the other considers traditional folk media the most effective channel for messages introducing change (Colletta, p. 14). From a distance, the information counselor is likely to see these two attitudes toward cultural change as contradictory. Will information provided to each of these ideologically-oriented adult educators, supporting two seemingly opposing trends in development, represent an unethical action in information counseling?

The information counselor has several options:

A. Blind transfer

Provide information in support of each seemingly extreme objective, modernization and tradition, ignoring what many professionals call the possibility of irreconcilable conflict.

B. Mediating transfer

Supply the requested information for each seemingly extreme objective, at the same time supplying unrequested information to each on the opposite trend, mediating in the alleged conflict.

C. Opinion-based transfer

Provide information in support of one of the trends. Conferences, meetings, editorials and the informal discussions of social scientists and development theorists often refer to one or the other extreme attitude toward the relationship of modernization and traditional culture. Such opinion may be adopted as the basis of supporting one of the trends.

D. Research-based transfer

Refer the queries to specialized organizations, professional associations or information clearinghouses for an immediate, temporary answer, and research the seemingly conflicting development policy issues in order to make a considered decision on in-depth information counseling to none, one, or both of the information users.

The fourth option is the most appropriate one in regard to the modernization/tradition controversy. In order to explicate the research problem which is seen by some development practitioners as a conflict, the literature review should begin with indigenous authors. Dimri (1986, p. 2) in her thesis on communication behavior, folk culture and oral tradition in the Garhwal Division of Uttar Pradesh, India, wrote that "women are chained by their tradition, customs, superstitions...." On the other hand, sometimes modernization was denounced because the construction of roads, dams, and industrial plants destroyed religious sites that were once regarded sacred. Such criticism was interpreted by Western development planners as resistance to all forms of technological development by traditionalists.

However, referring to rural populations, Dimri (1986, p. 3) suggested that familiarity with traditional media will help communication planners "to contact people for adopting innovations through their age old methods of communication and also enriching the modern methods of communication by a proper blend with folk culture and oral tradition..." In these reflections, the modernization/tradition issue appears as a potential solution rather than as a conflict.

The benefits and problems of a partnership between development planning, cultural customs and media are identified by numerous authors. There is a rich accumulation of research and descriptive literature in this area that deals with the use of folk customs and expressions and their effect on development communication. For

example, Rosinha (1978) traced the role of pictorial communication techniques in Mexico, and Ojoade (1986) the political use of oral literature. Even the care and use of forests, which in many countries are interwoven with the basic livelihood and spiritual beliefs of people, are linked with social policy on tribal participation in development (Bandhu and Garg, 1986). Other studies approach the linking of culture with the development process through a regional perspective (Anand, 1981). Moreover, development practitioners from industrialized countries are beginning to add their support to the modernization/tradition partnership. What earlier was seen as "irrational" resistance to change on the part of tradition-bound people, became more understandable. Cherns (1984, p. 98) acknowledges that

Recognition has grown among planners and theorists that culture is highly flexible and pliable, and what passed for irrational was more often than not highly rational given the circumstances, experience and knowledge of those concerned.

Epskamp describes the evolution of popular theatre into an artistic expression that "reinforces ethnic and class consciousness." He writes that "If folk artists are persuaded of the value of the message, they will translate it into dramatic terms in a way that an outsider, however well intentioned, cannot hope to accomplish" (Epskamp, 1984, p. 62). Epskamp quotes Freire on the nonneutral nature of information: "Although theatre is neutral as a technique, it can nevertheless serve purposes of oppression as well as of liberation. As soon as it is used to transmit direct information, knowledge or skills (e.g. within a social and education context) neutrality is out of the question, according to Freire (1970). Several papers documented the applications of indigenous institutions, processes and media to nonformal education in a collection edited by Kidd and Colletta (1980).

This example is intended to demonstrate that without tracing the evolution of critical development issues through the literature and personal contacts, the

information counselor might make some false assumptions and undertake too many "blind" efforts for information transfer. The research approach as a tool of learning should be part of the information counseling strategies.

Finally, we have to make a few observations on advocacy as a paradigm in information counseling before we conclude these reflections on information as development aid. Whenever inquiries received from adult educators in developing countries reveal a policy issue which might or might not represent a conflict, the counselor is called upon to consider advocating on behalf of one or both sides of the controversy.

Information advocacy is the practice of using information for advisement in order to solve a personal or social problem, further a personal or social cause, or argue on behalf of an individual, an organization or a social issue. Two major types of information advocacy are relevant to our concern with the integrity and effectiveness of information counseling.

A. Case advocacy

A concept well known in the service professions, advocacy of the case of a client in information counseling means acting on behalf of an information user and identifying and supporting his or her quest for relevant and timely information.

B. Cause advocacy

A concept known in politics, civic affairs, social movements, and development strategies, cause advocacy in information counseling means the use of information in support of an ideological, political or social issue.

While case advocacy is imbedded in all the codes of conduct and norms of the information professions, cause advocacy has been considered anathema. This attitude has its roots in an earlier age when the nonneutral nature of information was ignored. Today, the immense effect of technology and its power to expand human capacity to process information also brought to the surface the recognition of potential hazards to equity and integrity in information applications. The nonneutral nature of information cannot be ignored and consequently the nonneutrality of information provision cannot be demanded any more.

Based on the foregoing analysis, "information as development assistance" may be defined as professionally planned, personalized, in-depth process of information counseling to an individual or organization with the intention to support a specific cause in development. "Blind" information transfer that ignores the potential ethical and political consequences of information delivery and advocates for the case of the user whatever it might be, does not represent development assistance. Cause advocacy does, and it implies research into relevant issues, feedback from users, judicious decisions on the kind of information to be transferred, and responsibility for the integrity of the entire process.

PARTIAL CONCLUSIONS AND IMPLICATIONS FOR ADULT EDUCATION

Adult education has always been considered an effective channel by social movements of all sorts that seek to transmit their messages and bring about social transformation. In recent years, new configurations of information and data, empowered by new technology, have also been used by change-oriented social institutions for the support of their goals. In societies engrossed in a struggle for development and political stability, the role of both adult education and information

transfer has been intensified by the pressures of economic, social and cultural upheavals. The need for these agents of change is there, with public awareness of their potential impact rapidly growing, but the fragility of the scientific and economic systems and the weakness of the technological infrastructure prevent their adequate utilization. In these countries, the mutual strengthening of adult education programs and information services is an essential condition for further development.

This paper sought to identify links between adult education, information counseling policies, and development aid in order to reinforce such links as can be discovered. Reflecting on the case of the International Information Sharing Network (IISN), an attempt was made to focus on three questions posed at the outset. By now it has surely become clear that no answers can be expected yet from a study of the computerized system backing the information counselor or from evaluation research that is still to come for the project. Nor are conclusions complete and fixed in time since adult education and information transfer interact in an atmosphere of constantly changing development needs.

In response to our questions, we may suggest that distance information counseling, indeed, is a form of development assistance through adult educators if it supports not only their work performance, program development, and analytic capability, but also social and development policy issues. The problems encountered by the information service include a wide range of technological, professional, political, and ethical issues due to the nonneutrality of information. If ignored, these problems can fester and undermine the constructive interactions of adult educators, information professionals and development practitioners. Awareness of them, on the other hand, can lead to deliberate choices and solutions.

Finally, we believe that a good start on learning about adult educators' information needs in developing countries was made by the combination of research and service. We are also learning about information policy issues such as equity of access,

partnership versus intellectual domination; information sharing versus interference by information imposition; and cultural relevance versus the culture of technological superiority. These issues need further research and understanding.. There are certain implications for international interdependence in adult education as well as in information transfer that we may contemplate as we proceed into new phases of the project.

Being well informed about ways of dealing with everyday problems of life and work is one of the basic human needs. Without the motivation and ability to use applicable knowledge and experience, neither individuals nor social groups are able to improve their productivity and quality of life. In the developing areas more than anywhere else, continuous learning is a matter of survival. Social conditions are severely influenced by the harsh forces of nature, inadequate economies and explosive politics. Yet these areas are immensely rich in human creativity, cultural resources and ingenious ways of community life. To equip people with the ability and skills to minimize hardship and maximize their opportunities, is the joint task of adult education and information transfer.

The International Information Sharing Network is an attempt to use a combination of processes in order to support the work of adult educators in developing countries by providing timely, objective, relevant and useful information. Of course, one has to recognize that many aspects of information transfer and sharing cannot be accurately described, tested and measured. In the human enterprise of an international information sharing network, we often exchange imperfect information. However, the impact of information transfer is not always determined by timeliness, objectivity, relevance and usefulness. Information sharing is often a subjective process dependent on the intention of the participants, on plain good will, an act of cooperation, professional ethics, and tolerance of each other's shortcomings. Dependence becomes interdependence. In an atmosphere of trust, the formality of

information provision matters less than informal communication. This form of information support encourages interaction across cultural and political borders, and it is more likely to provide development assistance than formal information systems.

The International Information Sharing Network and information counseling of the Kellogg Project offer a unique opportunity to explore research questions; study policy issues at the interfaces of adult education, public participation and information processes; and provide a most unusual form of technical assistance to adult educators. These activities have been in progress for over a year. They are not dreams of the future but tangible evidences of information connectedness today.

This paper will conclude with a strong recommendation to the Kellogg Project to maintain continuity in, and widely disseminate the results of, the following activities:

1. The concept of a "learning organization" adopted for the project allows the staff to explore information phenomena in the course of intercultural information transfer. The project studies attitudes towards new technology expressed in letters, modes of interaction among adult educators, and trends in programs. Instead of waiting for the "perfect" information to be disseminated, such exploration can open the way to significant new RESEARCH QUESTIONS. How can a network break through the isolation of adult education workers in hardship areas and encourage them to share their experience? How did the recipients of information use it - unchanged or synthesized, extracted or expanded, by themselves or in a team? What is interdependence and how can it be achieved?

2. As we recognize the nonneutral characteristics of information transfer, an international network can begin to share information in a more honest atmosphere. There is no need to pretend value-free communications and to camouflage human preferences and biases. Respect for a plurality of expectations and wants may avoid the appearance of dogmatic approaches.

Such views could be deemed unwarranted were INFORMATION POLICIES not emerging in every country. High-level groups drawn from government and the private sector, with the support of international organizations, are beginning the slow process of formulating and coordinating information policies and including them into national development plans. Information policies are negotiated compromises of preferences and biases in information transfer. A widening awareness of the value-laden nature of information in various societies may lead to more interdependence in North-South and South-South cooperation. The Kellogg Project's study of the role of adult education in this cooperation is one of the project's most significant challenges.

3. Strengthening the capacity of adult education practitioners by distance information support enables the IISN to provide an INFORMATION SERVICE. To develop links where advanced communication technology is not yet operational and to draw practitioners into interaction with researchers, policymakers and administrators is a mandate flowing directly from the goals of adult education.

We are cognizant of the relatively limited number of people we can reach through IISN, of the barriers to communication and of technical difficulties. But we are constantly reminded of the nature of problem-focused research that aims at combining the search for an increased understanding of a problem with the perennial human quest for ways of improvement.

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